



ENERGY STAR *Small Business* . . .

Employee Productivity

Increase Productivity Through Energy Efficiency

NEW DESIGNS AND SYSTEMS IMPROVE WORK ENVIRONMENT

Did you know that you can increase employee productivity by upgrading your building to use energy more efficiently? Lighting, temperature, and humidity affect productivity both directly and indirectly.

Directly: New efficient designs can improve lighting quality, which in turn can reduce worker eyestrain and vision-related errors. Likewise, a well-designed and controlled heating, ventilating, and cooling system can improve air quality, reduce noise levels,

and create a more comfortable work environment.

Indirectly: Studies have shown that people who work in energy-efficient buildings experience an enhanced level of satisfaction. Being part of an environmentally friendly organization can help employees feel better about themselves and their company. This new appreciation can lead to an increase in professionalism and a higher level of performance.

C A S E S T U D Y

Hyde Tools, a New England company that makes hand tools, knew it could slash energy costs by upgrading its old fluorescent lights to high-pressure sodium-vapor and metal-halide lamps. Concerned about employee reaction, the company replaced the lights in just a small portion of the building. If, after six months, the employees said they preferred the old lights, the company planned to restore them. A few employees complained about the color of the new lights, but when the

old lights were turned back on after six months, the employees almost rioted. Why? The new lights had highlighted dirt on their work holding equipment—dirt that could damage the tools they were crafting. The quality of work increased because they could see what they had not seen before. Hyde Tools estimates that this improvement is worth \$25,000 per

year to the company and these bottom-line savings are critical to any business.



WORD OF MOUTH

Once you've realized the potential benefits of energy efficiency and increased productivity,

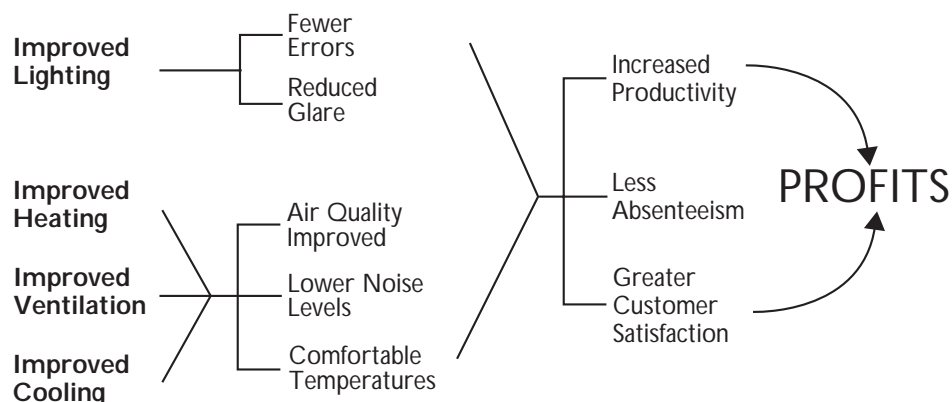
SHARE THE NEWS!

Tell your suppliers and business partners about your success in cutting energy waste and increasing productivity. It can only strengthen your relationship.



TECH TIP

Non-Utility Benefits Of Energy-Efficiency



Example: Lighting The Way To Better Productivity

Upgrades can improve productivity as well as save energy costs. Take the case of the business owners who decided to upgrade the lights in their 15,000-sq.ft. building. Upgrade costs were estimated at \$30,000 and annual energy savings were estimated at \$7,000, for a savings of 47¢ per square foot. The payback would be realized in **4.3 years**—good enough for some businesses, but a little too long for others. However, if the 35 people working in the building earned an average of \$40,000 a year in salary and benefits, their total cost equals \$93 per square foot. If the new lights allowed one-third of the workers to be productive for an additional 15 minutes a day because of reduced eyestrain, productivity would increase by just over 1 percent, or 93¢ per square foot. When this amount is added to the energy savings, payback occurs in just **1.4 years**.

Energy Savings	\$7,000 per year
Increased Productivity	+ \$14,000 per year
Total	\$21,000 per year

$$\text{Payback: } \frac{\$30,000}{\$21,000/\text{year}} = 1.4 \text{ years}$$

The profits gained by productivity are not only good for your business but for the economy as well. As business profits rise, the need to increase the prices for consumer products lessens. Energy efficiency and productivity are inherently anti-inflationary—and that's good for everyone!

More Information On Productivity

Greening the Building and the Bottom Line: Increasing Productivity Through Energy-Efficient Design
Joseph J. Romm (DOE), William D. Browning (RMI), www.rmi.org/catalog/gds.htm

Lean and Clean Management
Joseph J. Romm (DOE) solstice.crest.org/efficiency/joe_romm/leanclean.html

American Council for an Energy-Efficient Economy (ACEEE)
www.aceee.org



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